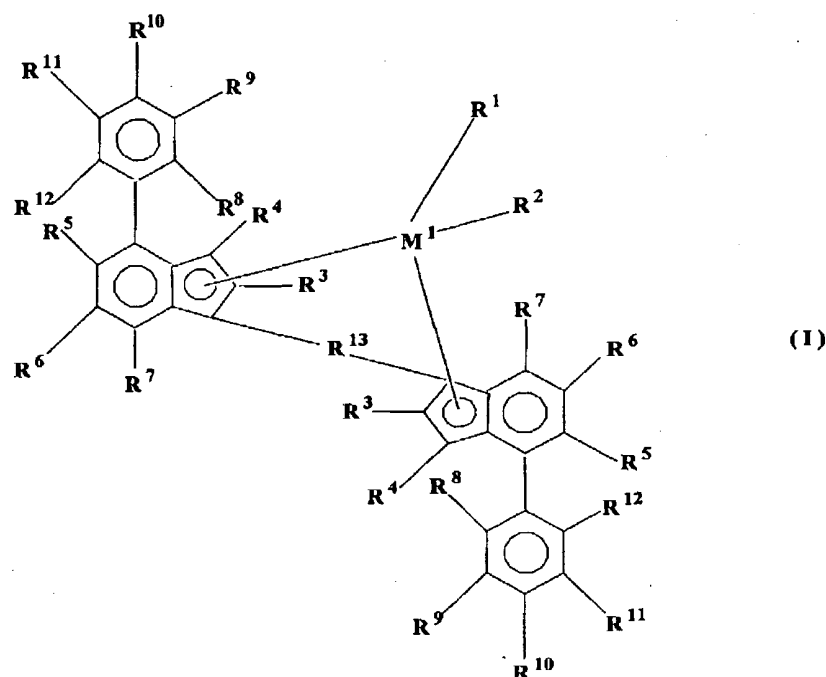


IN THE CLAIMS

1. (Amended) A compound represented by the formula:



wherein:  $M^1$  is selected from the group consisting of titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum and tungsten;

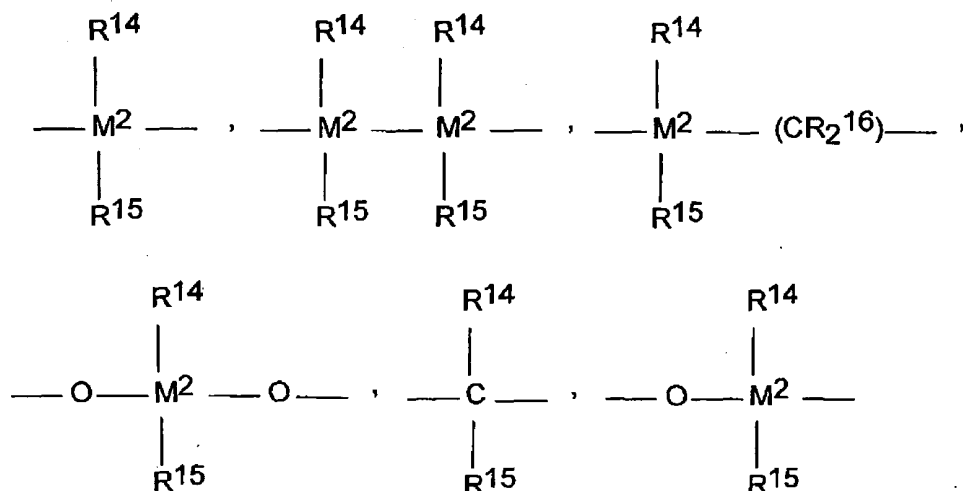
$R^1$  and  $R^2$  are identical or different, and are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, [a  $C_6$ - $C_{10}$  aryloxy group,] a  $C_2$ - $C_{40}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, an OH group or a halogen atom, or a conjugated diene which is optionally substituted with one or more hydrocarbyl, tri(hydrocarbyl)silyl groups or tri(hydrocarbyl)silylhydrocarbyl groups, said diene having up to 30 atoms not counting hydrogen;

$R^3$  are identical or different and are each a hydrogen atom, a halogen atom, a  $C_1$ - $C_{10}$  alkyl group which may be halogenated, a  $C_6$ - $C_{10}$  aryl group which may be halogenated, a  $C_2$ -

C<sub>10</sub> alkenyl group, a C<sub>7</sub>-C<sub>40</sub> arylalkyl group, a C<sub>7</sub>-C<sub>40</sub> alkylaryl group, a C<sub>8</sub>-C<sub>40</sub> arylalkenyl group, a -NR'<sub>2</sub>, -SR', -OR', -OSiR'<sub>3</sub> or -PR'<sub>2</sub> radical, wherein R' is one of a halogen atom, a C<sub>1</sub>-C<sub>10</sub> alkyl group, or a C<sub>6</sub>-C<sub>10</sub> aryl group;

R<sup>4</sup> to R<sup>7</sup> are identical or different and are hydrogen, as defined for R<sup>3</sup> or two or more adjacent radicals R<sup>5</sup> to R<sup>7</sup> together with the atoms connecting them form one or more rings;

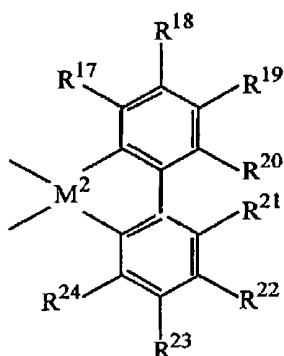
R<sup>13</sup> is



-B(R<sup>14</sup>)-, -Al(R<sup>14</sup>)-, -Ge-, -Sn-, -O-, -S-, -SO-, -SO<sub>2</sub>-, -N(R<sup>14</sup>)-, -CO-, -P(R<sup>14</sup>)-, or -P(O)(R<sup>14</sup>)-, or an amidoborane radical;

wherein: R<sup>14</sup>, R<sup>15</sup> and R<sup>16</sup> are identical or different and are a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>20</sub> alkyl group, a C<sub>1</sub>-C<sub>20</sub> fluoroalkyl or silaalkyl group, a C<sub>6</sub>-C<sub>30</sub> aryl group, a C<sub>6</sub>-C<sub>30</sub> fluoroaryl group, a C<sub>1</sub>-C<sub>20</sub> alkoxy group, a C<sub>2</sub>-C<sub>20</sub> alkenyl group, a C<sub>7</sub>-C<sub>40</sub> arylalkyl group, a C<sub>8</sub>-C<sub>40</sub> arylalkenyl group, a C<sub>7</sub>-C<sub>40</sub> alkylaryl group, or R<sup>14</sup> and R<sup>15</sup>, together with the atoms binding them, form a cyclic ring;

or R<sup>13</sup> is represented by the formula:



wherein:  $R^{17}$  to  $R^{24}$  are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, a  $C_6$ - $C_{10}$  aryloxy group, a  $C_2$ - $C_{40}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, an OH group, or a halogen atom, or two or more adjacent radicals  $R^{17}$  to  $R^{24}$ , including  $R^{20}$  and  $R^{21}$ , together with the atoms connecting them form one or more rings;

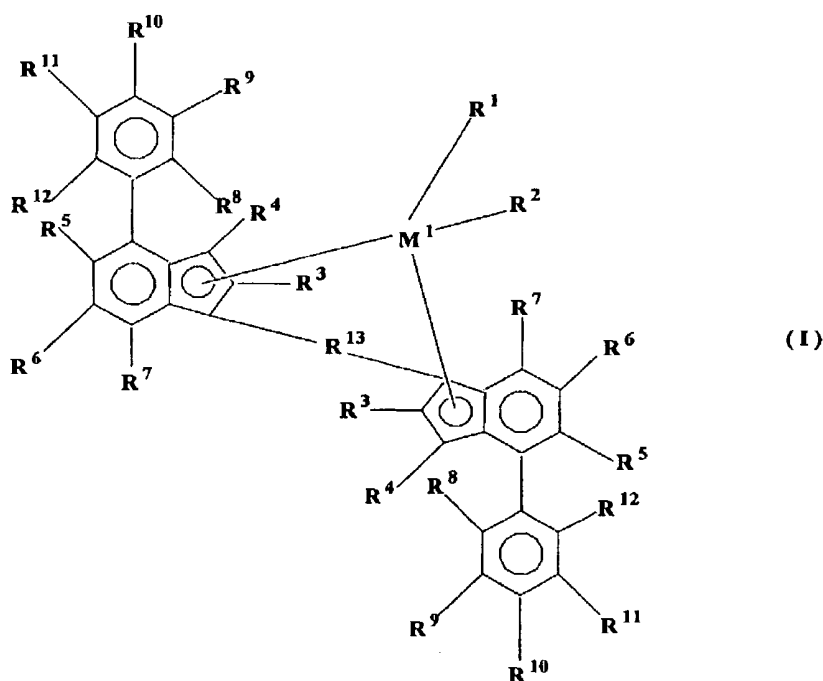
$M^2$  is one or more carbons, silicon, germanium or tin;

$R^8$ ,  $R^{10}$  and  $R^{12}$  are identical or different and have the meanings stated for  $R^4$  to  $R^7$ ; and

$R^9$  and  $R^{11}$  are identical or different and are each primary, secondary or tertiary butyl groups.

2. (Previously Presented) The compound of claim 1 wherein  $R^3$  are identical  $C_1$ - $C_4$  alkyl groups.

3. (Previously Presented) The compound of claim 1 wherein  $R^3$  are identical  $C_3$  alkyl groups.
4. (Previously Presented) The compound of claim 1 wherein  $R^4$  to  $R^7$  are hydrogen atoms.
5. (Previously Presented) The compound of claim 1 wherein  $R^4$  to  $R^7$  and  $R^{14}$  to  $R^{16}$  are hydrogen atoms.
6. (Previously Presented) The compound of claim 1 wherein  $R^9$  and  $R^{11}$  are both tertiary butyl groups.
7. (Previously Presented) The compound of claim 1 wherein  $R^4$  to  $R^7$  and  $R^{14}$  to  $R^{16}$  are hydrogen atoms and  $R^9$  and  $R^{11}$  are both tertiary butyl groups.
12. (Amended) A compound represented by the formula:



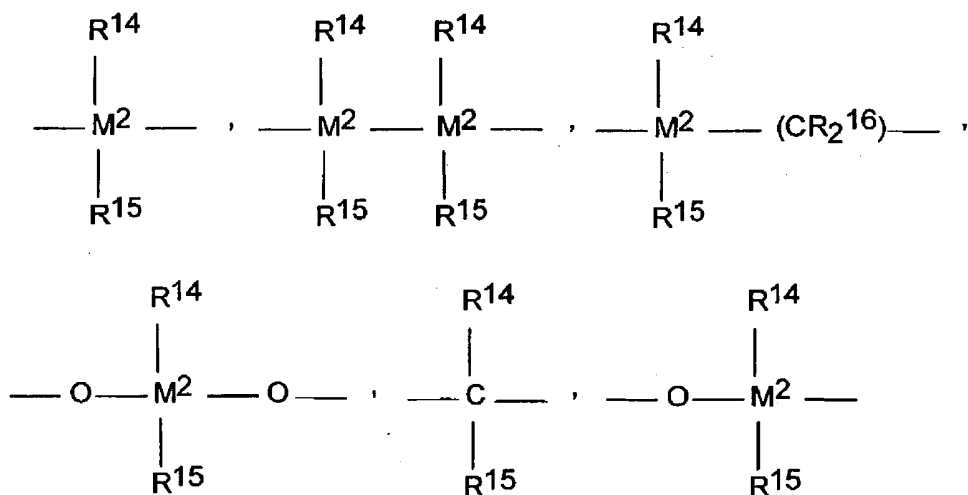
wherein:  $M^1$  is selected from the group consisting of titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum and tungsten;

$R^1$  and  $R^2$  are identical or different, and are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, [a  $C_6$ - $C_{10}$  aryloxy group,] a  $C_2$ - $C_{40}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, an OH group [or a halogen atom], or a conjugated diene which is optionally substituted with one or more hydrocarbyl, tri(hydrocarbyl)silyl groups or tri(hydrocarbyl)silylhydrocarbyl groups, said diene having up to 30 atoms not counting hydrogen;

$R^3$  are identical and are each a  $C_1$ - $C_{10}$  alkyl group;

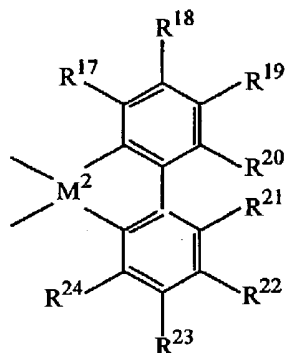
$R^4$  to  $R^7$  are identical or different and are hydrogen, as defined for  $R^3$  or two or more adjacent radicals  $R^5$  to  $R^7$  together with the atoms connecting them form one or more rings;

$R^{13}$  is



$-B(R^{14})-$ ,  $-Al(R^{14})-$ ,  $-Ge-$ ,  $-Sn-$ ,  $-O-$ ,  $-S-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-N(R^{14})-$ ,  $-CO-$ ,  $-P(R^{14})-$ , or  $-P(O)(R^{14})-$ , or an amidoborane radical;

wherein:  $R^{14}$ ,  $R^{15}$  and  $R^{16}$  are identical or different and are a hydrogen atom, a halogen atom, a  $C_1$ - $C_{20}$  alkyl group, a  $C_1$ - $C_{20}$  fluoroalkyl or silaalkyl group, a  $C_6$ - $C_{30}$  aryl group, a  $C_6$ - $C_{30}$  fluoroaryl group, a  $C_1$ - $C_{20}$  alkoxy group, a  $C_2$ - $C_{20}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_8$ - $C_{40}$  arylalkenyl group, a  $C_7$ - $C_{40}$  alkylaryl group, or  $R^{14}$  and  $R^{15}$ , together with the atoms binding them, form a cyclic ring;  
or  $R^{13}$  is represented by the formula:



wherein:  $R^{17}$  to  $R^{24}$  are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, [a  $C_6$ - $C_{10}$  aryloxy group,] a  $C_2$ - $C_{40}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, an OH group or a halogen atom, or two or more adjacent radicals  $R^{17}$  to  $R^{24}$ , including  $R^{20}$  and  $R^{21}$ , together with the atoms connecting them form one or more rings;

$M^2$  is one or more carbons, silicon, germanium or tin;

$R^8$ ,  $R^{10}$  and  $R^{12}$  are identical or different and have the meanings stated for  $R^4$  to  $R^7$ ;  
and

$R^9$  and  $R^{11}$  are identical or different and are each primary, secondary or tertiary butyl groups.

13. (Previously Presented) The compound of claim 12 wherein  $R^4$  to  $R^7$  are hydrogen atoms.